AIML4Educators

An Empowerment Program for Educators

@

Schools | Colleges | Teacherpreneurs

by

Prof M M Pant

*"Technology will not replace Teachers,
but Teachers who harness AI and allied technologies will
replace those who do not."*

September 2018

Overview:
60 content posts delivered on WhatsApp spread across 12 days in 2 weeks

AIML4Educators: Here the word educator includes School Teachers, University Faculty and Independent Educators not formally attached or linked to an educational Institution - the TeacherPreneurs.

The purpose of the program is to empower educators for this new age of 'Learning Machines' and how they would prepare their students for the emerging future. It will make educators familiar with the vocabulary of the field, appreciation of the key concepts, knowledge of the tools and technologies. It enables them realistic understanding of the challenges that remain and become aware of a number of instances of applications of AI/ML in diverse industries. Armed with this knowledge, they will be ready to be the agents of change in implementing new Pedagogies that deploy the power of these technologies to achieve personalisation and mastery learning for each of their students. The purpose of this program is to empower those teachers who want to do so to become active users of these technologies for their benefit, rather than being passive consumers of the earlier so called EdTech. In the age of AIEd, it is the teachers who will be pivotal.

This course is structured as 12 sessions comprising of 5 WhatsApp posts per session delivered for the day, and can be accessed flexibly in different formats ranging from an intensive 2 weeks (6 days a week) course to a relaxed 3 months course, or a comfortable one month course, depending upon what works best for the concerned educator.

Program Details

Day 1: Why the excitement about AI?
1.1: The History of AI
1.2: Drivers of the recent resurgence of AI: role of Big Data
1.3: What can AI do today?
1.4: Attributes of an Intelligent system
1.5: Why should educators be aware and informed of AI?

Day 2: Computational Thinking
2.1: What is Computational Thinking?
2.2: Decomposition
2.3: Pattern Recognition
2.4: Abstraction
2.5: Algorithms and Heuristics

Day 3: The Taxonomy of AI
3.1: Narrow AI (designed for specific tasks)
3.2: Broad General AI (ability to reason)
3.3: Machine Learning
3.4: Deep Learning
3.5: Types of Machine learning algorithms

Day 4: Elements/ Components of AI
4.1: Text processing
4.2: Image/object recognition
4.3: Speech recognition
4.4: Speech generation
4.5: Robotic control

Day 5: Artificial Neural Networks
5.1: What are Artificial neural networks?
5.2: Types of Artificial Neural Networks
5.3: Supervised mode : Regression and Classification
5.4: Unsupervised mode : Clustering and Dimensionality reduction
5.5: Reinforcement Learning

Day 6: The Technology Solutions
6.1: IBM : Cognitive Computing
6.2: Google : TensorFlow
6.3: Microsoft:
6.4: Amazon : Sagemaker and DeepLens
6.5: Languages for AI applications

Day 7: The Mathematical Foundations
7.1: Where is the Mathematics used?
7.2: Linear Algebra
7.3: Statistics and Probability
7.4: Calculus
7.5: Optimization Techniques

Day 8: The Future of AI
8.1: Tipping points for various AI applications
8.2: Impact of AI on medicine and Healthcare
8.3: AIML as a service : Google cloud AutoML
8.4: AI on mobile devices
8.5: Lifelong Learning resources for AI: specific topics as well as full courses

Day 9: Expectations from AI in education
9.1: The main challenges to education and expectations from AI
9.2: The key ideas that have relevance for education
9.3: AI in School Education, home schooling and lifelong learning
9.4: What can AI do for education today ?
9.5: How AI will disruptively transform education?

Day 10: Implementation Possibilities
10.1: Automation of administrative tasks
10.2: Artificial Intelligence for assessments
10.3: AI Chatbots as personal tutors/mentors
10.4: Predictive models and Recommendation Engines
10.5: Educators successfully harnessing AI

Day 11: Application to assessing essay type questions
11.1: Formulating the problem
11.2: Steps of the solution
11.3: Examples of implementation
11.4: Limitations
11.5: How can you use this?

Day 12: Chatbots as Teaching Assistants
12.1: Formulating the problem
12.2: Schematics of the solution
12.3: Jill Watson
12.4: Limitations
12.5: How you can use this ?

About Prof M M Pant:

[Professor M M Pant](#) is closely associated with the IIT system having received a Ph.D. in Computational Physics from IIT Roorkee, taught as a faculty at IIT Kanpur for about a decade and having been a member of the Board of Management of IIT Delhi for 6 years.

He has been Professor of Computer Science at IGNOU for about 15 years, and Pro Vice-Chancellor there very briefly.

His current mission is to evangelise lifelong learning using WhatsApp on mobile, through which he runs weeklong and weekend programs on a variety of topics. These courses are spanning the domains of lifelong learning, entrepreneurship and technologies for the fast emerging 4th Industrial Age driven by Artificial Intelligence and Machine Learning.

Fee structure :

Fee for the 2 week program : Rs 5000+ GST Rs 900= Rs 5900
Fees can be easily paid by **Paytm** to mobile number :+919810073724

For those who would rather pay by Bank Transfer, here are the details:
For NEFT / RTGS
      Beneficiary Name   MADAN MOHAN PANT
      Bank Name   HDFC BANK
      Branch   Unit No.05 A & B, Ground Floor, Tower A, Unitech Cyber Park, Sec 39,Gurgaon – 122002 Haryana
      Account Number   2645100000301
      IFSC code   HDFC0002645 (first four digits are alphabets and remaining 7 are numbers)

For International remittance
      Beneficiary Name   MADAN MOHAN PANT
      Bank Name   HDFC BANK
      Branch   Unit No.05 A & B, Ground Floor, Tower A, Unitech Cyber Park, Sec 39,Gurgaon – 122002 Haryana
      Account Number   2645100000301
      Swift   HDFCINBB

Customising the program:
At the request of educational Institutions, this program can be customised for blended delivery with face to face sessions and WhatsApp based social learning.

For registration and any further queries on this program, please contact us by:
      eMail: mmpant@gmail.com
      WhatsApp: +919810073724
      Twitter: @mmpant
      Web: https://mmpant.com/

Execution Support by

LMP Education Trust

greenworkforce.in